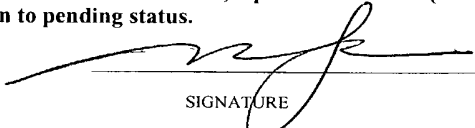


FORM PTO-1390 (REV 10-2000)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER T-10C
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>			U.S. APPLICATION NO. <b>10/031642</b>
INTERNATIONAL APPLICATION NO. PCT/NL00/00283	INTERNATIONAL FILING DATE May 1, 2000	PRIORITY DATE CLAIMED April 29, 1999	
TYPE OF INVENTION Radiographic Network			
APPLICANT(S) FOR DO/EO/US NEDERHOED, Reinder Eric			
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> <li><input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.</li> <li><input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.</li> <li><input checked="" type="checkbox"/> This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)).</li> <li><input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).</li> <li><input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li><input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li><input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li><input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li><input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).</li> <li><input checked="" type="checkbox"/> Amendments to the claims of the International Application as under PCT Article 19 (35 U.S.C. 371(c)(3))             <ol style="list-style-type: none"> <li><input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li><input checked="" type="checkbox"/> have been communicated by the International Bureau.</li> <li><input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li><input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li><input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li><input type="checkbox"/> An oath or declaration of the inventors(s) (35 U.S.C. 371(c)(4)).</li> <li><input checked="" type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> <p><b>Item 11 to 16 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li><input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li><input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li><input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment.</li> <li><input type="checkbox"/> A substitute specification.</li> <li><input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li><input checked="" type="checkbox"/> Other items or information: EPO Search Report</li> </ol>			

531 Rec'd FC/PT 29 OCT 2001

U.S. APPLICATION NO. <b>10/031642</b>		INTERNATIONAL APPLICATION NO. PCT/NL00/00283		ATTORNEY'S DOCKET NUMBER T-10C	
17. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE ( 37 CFR 1.492 (a) (1) - (5) :</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. .... <b>\$1040.00</b> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO OR JPO. .... <b>\$890.00</b> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... <b>\$740.00</b> International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... <b>\$710.00</b> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) ..... <b>\$100.00</b>  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>CALCULATIONS PTO USE ONLY</b>	
Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	9 - 20 =	0	X <b>\$18.00</b>	\$	0
Independent Claims	1 - 3 =	0	X <b>\$84.00</b>	\$	0
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ <b>\$280.00</b>	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	890.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	
<b>SUBTOTAL =</b>				\$	890.00
Processing fee of <b>\$130.00</b> for furnishing English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$	890.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property +				\$	
<b>TOTAL FEES ENCLOSED =</b>				\$	890.00
				<b>Amount to be Refunded:</b>	\$
				<b>Charged:</b>	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>890.00</u> to cover the above fees is enclosed.  b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.  c. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</b>					
SEND ALL CORRESPONDENCE TO:  <div style="display: flex; justify-content: space-between;"> <div>           Mark Zovko            36504 28th Avenue South            Federal Way, WA 98003            253-838-1909         </div> <div style="text-align: center;">             SIGNATURE         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>           Mark Zovko            NAME             27849            REGISTRATION NUMBER         </div> <div></div> </div>					

Certificate of Express Mailing – 37 CFR 1.10

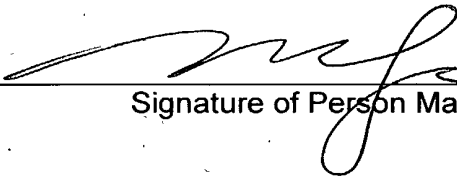
"Express Mail" Mailing Number EK994468063US

Date of Deposit October 29, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addresses" service under 37 CFR 1.10 on the date indicated above and is addressed to Commissioner of Patents and Trademarks, Washington D.C., 20231.

MARK ZOVKO

Name of Person Mailing Paper or Fee

  
Signature of Person Mailing paper or Fee

100031642 10/03/00

10/031642

531 Rec'd FC/P.L. 29 OCT 2001

International Application No: PCT/NL00/00283  
International Filing Date: 1 May 2000  
Priority Date Claimed: 29 April 1999  
Applicant: NEDERHOED, Reinder Eric  
For: Radiographic Network

Commissioner for Products and Trademarks  
Washington, D.C. 20231

Sir:

Please enter the enclosed Preliminary Amendment.

**Preliminary Amendment**

In the claims please amend claims 3, 5, 7, 8, and 9 as follows:

3. (once amended) Device as claimed in claim 1, wherein the central processor unit is programmed such that it passes a data signal received by the radio receiver to the input / output member when an address associated with the data signal corresponds with the address of the node element.
5. (once amended) Device as claimed in claim 1, wherein at least one data-generating device is connected to the input / output member and the central processor unit is programmed such that in accordance with a determined protocol it addresses and formats data.
7. (once amended) Device as claimed in claim 1, wherein the radio receivers of at least two other node elements are arranged within the range of each radio transmitter of a node element.
8. (once amended) Device as claimed in claim 1, wherein a control device such as a computer is connected to the input / output member.

9. (once amended) Application of the device according to the invention as claimed in claim 1 in horticulture, in particular glass horticulture, wherein an area for monitoring is provided with a pattern of sensors.

**Remarks**

The preliminary amendment is used to eliminate multiple dependent claims.

Sincerely,



Mark Zovko  
Reg. No. 27849  
for applicant

October 29, 2001  
(253) 838-1909

[illegible]

- 

**RADIOGRAPHIC NETWORK**

The invention relates to a device for transferring information which comprises a number of node elements. Such a device can be designated a network.

Each of the node elements has its own address so  
5 that information intended for that node element and information originating from that node element can be identified as being associated with that node element.

Networks, particularly those used for transferring digital information between computers, are generally  
10 known. These typically comprise direct line connections and/or switched line connections over which the information is transferred. The information is sent along the line connections in accordance with a specified protocol so that each of the node elements can  
15 make use of the information.

The laying of line connections is generally quite a costly business, particularly when these line connections have to be arranged between separate buildings. The line connections must then generally be  
20 buried in the ground.

This drawback is obviated in the device according to the invention as characterized in claim 1. This network according to the invention operates radiographically so that physical connections between  
25 the node elements are not necessary. A data signal is transferred from the one node element to another until the node element is reached for which the data signal is intended.

A further favourable development is characterized  
30 in claim 2. This prevents a data signal creating repetitive feedback in the device, whereby proper operation and rapid data transfer could be adversely affected. The data signal will spread through the

network like the rings resulting from a stone in water and be "quenched" at the edges of the network.

The device can be embodied such that a data signal is transmitted a number of times at intervals in order to ensure that it arrives at the intended destination. The measure of claim 4 is preferably applied herein. As soon as the node element from which the data signal originally comes receives the confirmation signal, repeated transmission of the original data signal can be stopped.

The original data signal sent by a node element is generated in the embodiment according to claim 5 by a data-generating device connected to the input/output member. The data-generating device thus provides the data which must be transferred to another location in the network. Using the radio transmitter the central processor unit then sends the data which is packaged in a particular protocol.

A node element can also comprise a data-processing device and data supplied via the network is then further processed by this data-processing unit.

The measure of claim 7 is preferably applied. The signal is hereby prevented from being able to run on, for instance as a consequence of a malfunction of one of the radio receivers.

The device according to the invention can be applied for mutual connection of a number of computers. A number of node elements can herein be applied which are used solely to pass on the data signal from one computer to another, particularly when the distance between the computers for mutual connection is greater than the range of any of the radio transmitters.

The radio receivers and radio transmitters suitably operate at a frequency and with a power such that no authorization is required therefor. A suitable frequency is therefore 433 MHz.



Instead of mutually connecting a number of computers, the network according to the invention can also be used in suitable manner to control the systems present in the vicinity from a central point at which a computer is arranged. These can be for instance indicator and alarm systems in factories and for instance homes for the elderly and nursing homes and culture systems in agriculture and horticulture.

Another suitable application is the control of systems in buildings, such as heating installations, lighting and the like. The device is applied particularly usefully here when these buildings are separate buildings such as for instance in bungalow parks. In this respect an application in glass horticulture can also be envisaged.

Another suitable application is as theft alarm system, wherein a number of individual objects have to be monitored. Yachts in a marina, transport containers at a storage depot and the like can be envisaged here. Each of the objects for monitoring, such as the yachts or the containers, is provided with a node element according to the invention, on the input/output member of which one or more alarm sensors are connected. The device can be embodied herein such that each of the node elements is periodically checked for proper operation in order to enable timely recognition of sabotage.

In systems wherein the device is used to control or monitor a number of separate buildings and/or objects, the central computer can also be used in mobile manner. As long as it is situated within the range of the radio transmitter of one or more of the node elements, data signals intended for this central computer and originating from this central computer will be processed correctly in the network. In the stated application for bungalow parks, the device can for instance be applied to monitor and control the installations in each of the bungalows. It is thus possible to monitor the proper

operation of the central heating devices in each of the bungalows, but also to remotely switch them on and off and adjust the thermostat thereof. When the bungalow is not occupied, the thermostat can for instance be set

5 remotely to a position at which freezing of pipes is prevented. It is also possible to set the thermostat to a comfortable value some time before the arrival of new guests, so that they arrive to find a pleasantly heated bungalow.

10 Mains power failure can for instance be detected in similar manner. Only one node element need generally be applied per bungalow. All desired information signals and controls can be performed via this node element.

The bungalows in a bungalow park are usually spaced

15 such that it is possible to suffice with one node element per bungalow to ensure a good transmission through the network. In the case of greater distances additional node elements can be incorporated.

Another example of the present invention is the

20 application in climate control in glass horticulture.

Within glass horticulture a system can be developed wherein, on the basis of diverse sensors (about 50 per hectare) in the glasshouse, a picture can be formed of the climatological situation in this glasshouse, such as

25 determining the temperature, relative humidity, CO<sub>2</sub> and so on.

For a uniform growth of the crop it is particularly important to provide a very uniform climate through the glasshouse.

30 According to the invention the differences can be detected and corrected with a network of sensors over the whole area of the glasshouse. Sunblinds, heating equipment and sprinkler installations are for instance actuated subject to the detected differences.

35 The pattern of sensors can be sub-divided into sub-patterns which each co-act with a node element in accordance with the network system of the invention. It



30           5. Device as claimed in any of the foregoing  
claims, wherein at least one data-generating device is  
connected to the input/output member and the central  
processor unit is programmed such that in accordance  
with a determined protocol it addresses and formats data

received via the input/output member of the data-generating device and passes it to the radio transmitter.

5 6. Device as claimed in claim 3, wherein at least one data-processing device is connected to the input/output member and the central processor unit is programmed such it deduces data from a data signal received from the radio receiver and passes it to the data-processing device.

10 7. Device as claimed in any of the foregoing claims, wherein the radio receivers of at least two other node elements are arranged within the range of each radio transmitter of a node element.

15 8. Device as claimed in any of the foregoing claims, wherein a control device such as a computer is connected to the input/output member.

20 9. Application of the device according to the invention as claimed in any of the foregoing claims in horticulture, in particular glass horticulture, wherein an area for monitoring is provided with a pattern of sensors.

\*\*\*\*\*

COMBINED DECLARATION AND POWER OF ATTORNEY  
FOR A PATENT APPLICATION

ATTORNEY DOCKET NO. \_\_\_\_\_

As below named inventor, I hereby declare that: My residence post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

\* Radiographic network

the specification of which is attached hereto unless one of the following boxes is checked:

- ☐ The Specification was filed on \_\_\_\_\_ and was amended on \_\_\_\_\_ and was assigned Serial No. \_\_\_\_\_
- ☒ was filed as PCT international application number PCT/NL00/00283 on 1-5-2000 and was amended under PCT Article 19 on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I do not know and do not believe that the invention was ever known or used in the United States of America before my or our invention thereof or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, or in public use or sale in the United States of America more than one year prior to this application; that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application; and that no application for patent or inventor's certificate on said invention has been filed by me or my representatives or assigns in any country foreign to the United States of America, except as follows:

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below:

Prior Foreign Applications(s)

Prior Foreign Applications(s)	Country	Month/Day/Year Filed	Priority	Claimed
<u>1011944</u>	<u>NL (The Netherlands)</u>	<u>04-29-1999</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
<u>1013444</u>	<u>NL (The Netherlands)</u>	<u>11-01-1999</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More Than 12 Months (6 Months for Designs) Prior To The Filing Date of This Application:

Country	Application No.	Date of Filing (Month/Day/Year)
_____	_____	_____
_____	_____	_____

I hereby claim the benefit under Title 35, United States Code, §120 of any United States Application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)
_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)

NOTE: Must be completed

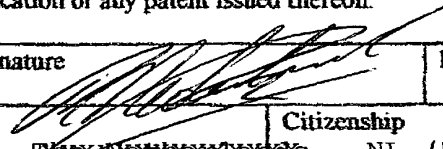
I hereby appoint the following attorneys to prosecute this application and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected herewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary.

1 Mark Zovko, Reg. No. 27849

Send Correspondence to: Mark Zovko  
36504 28th Ave S.  
Federal Way, WA 98003

Phone: (253) 838-1909

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Reinder Eric	Nederhoed		29-11-'01
Residence		Citizenship	
<del>Koevordermeerstraat 1, 8531 RP, LEMMER, The Netherlands</del>		NL (The Netherlands)	
Post Office Address (Complete Street Address including City, State & Country)			
Koevordermeerstraat 1, 8531 RP, LEMMER, The Netherlands NLX			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			
GIVEN NAME	FAMILY NAME	Inventor's Signature	Date
Residence		Citizenship	
Post Office Address (Complete Street Address including City, State & Country)			